

## ABSTRACT

A two-phase cooling apparatus for cooling an electronic assembly is disclosed.

The apparatus comprises an evaporator having a single-phase inlet for receiving a  
5 single-phase liquid coolant and a two-phase outlet for discharging a two-phase  
coolant. A local condenser is disposed proximate the evaporator and has a two-phase  
inlet coupled to the evaporator outlet. The local condenser includes a single-phase  
liquid coolant outlet. The apparatus further includes a pump having an output coupled  
to the evaporator inlet, and an input coupled to the local condenser outlet.

10